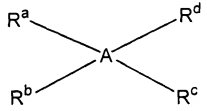
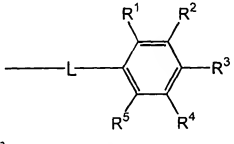
1. A method for reducing food intake in a subject, the method comprising administering to the subject in need thereof an effective amount of a compound of the formula:



wherein

A is a hydrocarbon, an oxygen, a sulfur, or a nitrogen; said hydrocarbon being selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, and heteroaryl, each of which is optionally substituted with alkoxy, hydroxyl, hydroxylalkyl, carboxyl, halo, haloalkyl, amino, thio, nitro, cyano, oxo, alkylcarbonyloxy, alkyloxycarbonyl, arylcarbonyloxy, aryloxycarbonyl, alkylcarbonyl, arylcarbonyl, formyl, aminocarbonyl, alkylcarbonylamino, arylaminocarbonyl, or arylcarbonylamino; and

each of R^a, R^b, R^c and R^d, independently, is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, aralkyl, heteroaralkyl, alkoxy, hydroxyl, hydroxylalkyl, carboxyl, halo, haloalkyl, amino, aminoalkyl, thio, thioalkyl, nitro, cyano, alkylcarbonyloxy, alkyloxycarbonyl, alkylcarbonyl, formyl, aminocarbonyl, alkylcarbonylamino, or a moiety of the formula:

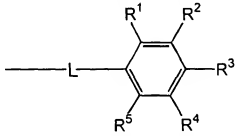


in which L is $-L^1-L^2-L^3-$ wherein L^2 is -O-, -S-, -SO-, $-SO_2-$, -N(R')-, -CO-, -N(R')-CO-, -CO-N(R')-, -N(R')-SO_2-, $-SO_2$-N(R')-, -O-CO-, -CO-O-, -O-SO_2-, $-SO_2$-O-, or deleted, and each of L^1 and L^3, independently, is $-(CR'=CR'')_n-$, $-(C\equiv C)_n-$, $-(C(R')(R''))_n-$, or deleted; each of R' and R", independently, being hydrogen, alkyl, alkoxy, hydroxylalkyl, hydroxyl, amino, nitro, cyano, halo, or haloalkyl, and n being 1, 2, or 3; and each of R^1, R^2, R^3, R^4, and R^5, independently, is hydrogen, alkyl, alkenyl, alkynyl, alkoxy, hydroxyl, hydroxylalkyl,

carboxyl, halo, haloalkyl, amino, thio, nitro, cyano, alkylcarbonyloxy, alkyloxycarbonyl, alkylcarbonyl, formyl, aminocarbonyl, alkylcarbonylamino, aminocarbonyloxy, or alkyloxycarbonylamino;

provided that when A is an oxygen or a sulfur, both R^a and R^b are deleted; and when A is a nitrogen, R^a is deleted; and

further provided that at least two of R^a, R^b, R^c, and R^d is a moiety of the formula

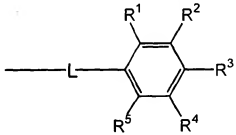


in which at least two of R^1, R^2, R^3, R^4, and R^5 are hydroxyl, alkoxy, or alkylcarbonyloxy that are at meta or ortho positions with respect to each other; or a pharmaceutically acceptable salt thereof.

2. The method of claim 1, wherein A is cycloalkyl, heterocycloalkyl, aryl, or heteroaryl.

3. The method of claim 2, wherein A is a monosaccharide.

4. The method of claim 2, wherein both R^a and R^b are of the formula



and each of R^a and R^b are bonded to ring atoms of A that are adjacent to each other.

5. The method of claim 4, wherein L is -CO-, -N(R')-CO-, -O-CO-, or deleted.

6. The method of claim 5, wherein either $R^1$and R^2 or R^3 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

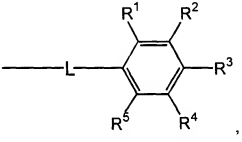
7. The method of claim 5, wherein either R^1 and R^3 or R^2 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

8. The method of claim 5, wherein R^1, R^2, and R^3; or R^2, R^3, and R^4; or R^3, R^4 and R^5, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

9. The method of claim 8, wherein each of R^2, R^3, and R^4, independently, is hydroxyl, alkoxy, or alkylcarbonyloxy.

10. The method of claim 1, wherein A is alkenyl.

11. The method of claim 10, wherein both R^a and R^b are of the formula



and each of R^a and R^b are bonded to the same side of a double bond.

12. The method of claim 11, wherein L is -CO-, -N(R')-CO-, -O-CO-, $-CH_2-$ or deleted.

13. The method of claim 12, wherein either R^1 and R^2 or R^3 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

14. The method of claim 12, wherein either R^1 and R^3 or R^2 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

15. The method of claim 12, wherein each of R^1, R^2, and R^3; or each of R^2, R^3, and R^4; or each of R^3, R^4 and R^5, independently, is hydroxyl, alkoxy, or alkylcarbonyloxy.

16. The method of claim 15, wherein each of R^2, R^3, and R^4, independently, is hydroxyl, alkoxy, or alkylcarbonyloxy.

17. The method of claim 1, wherein A is a nitrogen.

18. The method of claim 17, wherein L is -CO-, -N(R')-CO-, $-CH_2-$ or deleted.

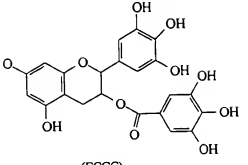
19. The method of claim 18, wherein either R^1 and R^2 or R^3 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

20. The method of claim 19, wherein either R^1 and R^3 or R^2 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

21. The method of claim 20, wherein each of R^1, R^2, and R^3; or each of R^2, R^3, and R^4; or each of R^3, R^4 and R^5, independently, is hydroxyl, alkoxy, or alkylcarbonyloxy.

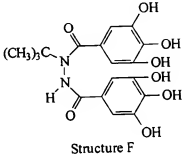
22. The method of claim 21, wherein each of R^2, R^3, and R^4, independently, is hydroxyl, alkoxy, or alkylcarbonyloxy.

23. The method of claim 1, wherein the compound is

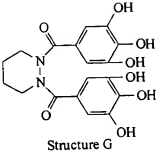


(EGCG)
Structure E

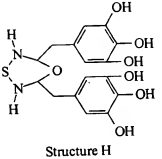
24. The method of claim 1, wherein the compound is



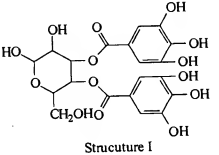
Structure F



Structure G

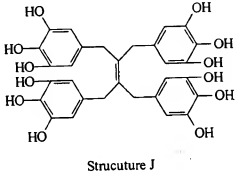


Structure H



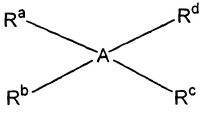
Strucuture I

or



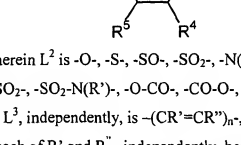
Strucuture J

25. A method for reducing the levels of an endocrine in a subject, the method comprising administering to the subject in need thereof an effective amount of a compound of the formula:



wherein

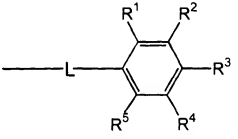
A is a hydrocarbon, an oxygen, a sulfur, or a nitrogen; said hydrocarbon being selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, and heteroaryl, each of which is optionally substituted with alkoxy, hydroxyl, hydroxylalkyl, carboxyl, halo, haloalkyl, amino, thio, nitro, cyano, oxo, alkylcarbonyloxy, alkyloxycarbonyl, arylcarbonyloxy, aryloxycarbonyl, alkylcarbonyl, arylcarbonyl, formyl, aminocarbonyl, alkylcarbonylamino, arylaminocarbonyl, or arylcarbonylamino; and each of R^a, R^b, R^c and R^d, independently, is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, aralkyl, heteroaralkyl, alkoxy, hydroxyl, hydroxylalkyl, carboxyl, halo, haloalkyl, amino, aminoalkyl, thio, thioalkyl, nitro, cyano, alkylcarbonyloxy, alkyloxycarbonyl, alkylcarbonyl, formyl, aminocarbonyl, alkylcarbonylamino, or a moiety of the formula:



in which L is $-L^1-L^2-L^3-$ wherein L^2 is -O-, -S-, -SO-, $-SO_2-$, -N(R')-, -CO-, -N(R')-CO-, -CO-N(R')-, $-N(R')-SO_2-$, $-SO_2-N(R')-$, -O-CO-, -CO-O-, $-O-SO_2-$, $-SO_2-O-$, or deleted, and each of L^1 and L^3, independently, is $-(CR'=CR'')_n-$, $-(C\equiv C)_n-$, $-(C(R')(R''))_n-$, or deleted; each of R' and R'', independently, being hydrogen, alkyl, alkoxy, hydroxylalkyl, hydroxyl, amino, nitro, cyano, halo, or haloalkyl, and n being

1, 2, or 3; and each of R^1, R^2, R^3, R^4, and R^5, independently, is hydrogen, alkyl, alkenyl, alkynyl, alkoxy, hydroxyl, hydroxylalkyl, carboxyl, halo, haloalkyl, amino, thio, nitro, cyano, alkylcarbonyloxy, alkyloxycarbonyl, alkylcarbonyl, formyl, aminocarbonyl, alkylcarbonylamino, aminocarbonyloxy, or alkyloxycarbonylamino; provided that when A is an oxygen or a sulfur, both R^a and R^b are deleted; and when A is a nitrogen, R^a is deleted; and

further provided that at least two of R^a, R^b, R^c, and R^d is a moiety of the formula



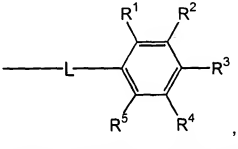
wherein at least two of R^1, R^2, R^3, R^4, and R^5 are hydroxyl, alkoxy, or alkylcarbonyloxy that are at meta or ortho positions with respect to each other; or a pharmaceutically acceptable salt thereof;

said endocrine being selected from the group consisting of testosterone, estradiol, leptin, insulin, insulin-like growth factor, and luteinizing hormone.

26. The method of claim 25, wherein A is cycloalkyl, heterocycloalkyl, aryl, or heteroaryl.

27. The method of claim 26, wherein A is a monosaccharide.

28. The method of claim 26, wherein both R^a and R^b are of the formula



and each of R^a and R^b are bonded to ring atoms of A that are adjacent to each other.

29. The method of claim 28, wherein L is -CO-, -N(R')-CO-, -O-CO-, or deleted.

30. The method of claim 29, wherein either $R^1$and R^2 or R^3 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

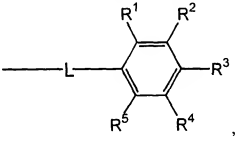
31. The method of claim 29, wherein either $R^1$and R^3 or R^2 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

32. The method of claim 29, wherein R^1, R^2, and R^3; or R^2, R^3, and R^4; or R^3, R^4 and R^5, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

33. The method of claim 32, wherein each of R^2, R^3, and R^4, independently, is hydroxyl, alkoxy, or alkylcarbonyloxy.

34. The method of claim 25, wherein A is alkenyl.

35. The method of claim 34, wherein both R^a and R^b are of the formula



and each of R^a and R^b are bonded to the same side of a double bond.

36. The method of claim 35, wherein L is -CO-, -N(R')-CO-, -O-CO-, $-CH_2-$ or deleted.

37. The method of claim 36, wherein either $R^1$and R^2 or R^3 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

38. The method of claim 36, wherein either $R^1$and R^3 or R^2 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

39. The method of claim 36, wherein R^1, R^2, and R^3; or R^2, R^3, and R^4; or R^3, R^4 and R^5, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

40. The method of claim 39, wherein each of R^2, R^3, and R^4, independently, is hydroxyl, alkoxy, or alkylcarbonyloxy.

41. The method of claim 25, wherein A is a nitrogen.

42. The method of claim 41, wherein L is -CO-, -N(R')-CO-, $-CH_2-$ or deleted.

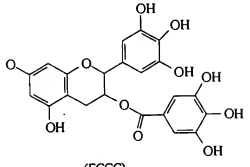
43. The method of claim 42, wherein either $R^1$and R^2 or R^3 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

44. The method of claim 43, wherein either $R^1$and R^3 or R^2 and R^4, independently, are hydroxyl, alkoxy, or alkylcarbonyloxy.

45. The method of claim 44, wherein each of R^1, R^2, and R^3; or each of R^2, R^3, and R^4; or each of R^3, R^4 and R^5, independently, is hydroxyl, alkoxy, or alkylcarbonyloxy.

46. The method of claim 45, wherein each of R^2, R^3, and R^4, independently, is hydroxyl, alkoxy, or alkylcarbonyloxy.

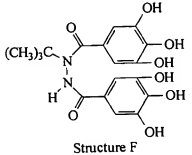
47. The method of claim 25, wherein the compound is



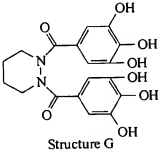
(EGCG)

Structure E

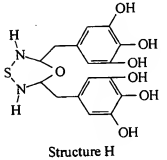
48. The method of claim 25, wherein the compound is



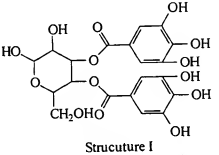
Structure F



Structure G

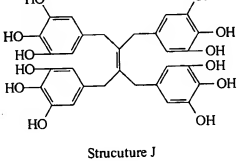


Structure H



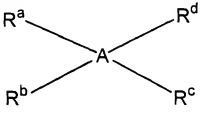
Strucuture I

or



Strucuture J

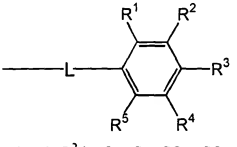
49. A liposomal preparation which comprises a liposome and a compound entrapped therein, said compound being of the formula:



wherein

A is a hydrocarbon, an oxygen, a sulfur, or a nitrogen; said hydrocarbon being selected from the group consisting of alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, and heteroaryl, each of which is optionally substituted with alkoxy, hydroxyl, hydroxylalkyl, carboxyl, halo, haloalkyl, amino, thio, nitro, cyano, oxo, alkylcarbonyloxy, alkyloxycarbonyl, arylcarbonyloxy, aryloxycarbonyl, alkylcarbonyl, arylcarbonyl, formyl, aminocarbonyl, alkylcarbonylamino, arylaminocarbonyl, or arylcarbonylamino; and

each of R^a, R^b, R^c and R^d, independently, is hydrogen, alkyl, alkenyl, alkynyl, cycloalkyl, heterocycloalkyl, cycloalkenyl, heterocycloalkenyl, aryl, heteroaryl, aralkyl, heteroaralkyl, alkoxy, hydroxyl, hydroxylalkyl, carboxyl, halo, haloalkyl, amino, aminoalkyl, thio, thioalkyl, nitro, cyano, alkylcarbonyloxy, alkyloxycarbonyl, alkylcarbonyl, formyl, aminocarbonyl, alkylcarbonylamino, or a moiety of the formula:

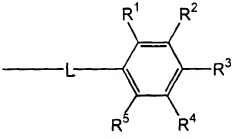


in which L is $-L^1-L^2-L^3-$ wherein L^2 is -O-, -S-, $-SO-$, $-SO_2-$, $-N(R')-$, -CO-, $-N(R')-CO-$, $-CO-N(R')-$, $-N(R')-SO_2-$, $-SO_2-N(R')-$, -O-CO-, -CO-O-, $-O-SO_2-$, $-SO_2-O-$, or deleted, and each of L^1 and L^3, independently, is $-(CR'=CR'')_n-$, $-(C\equiv C)_n-$, $-(C(R')(R'')_n-$, or deleted; each of R' and R", independently, being hydrogen, alkyl, alkoxy, hydroxylalkyl, hydroxyl, amino, nitro, cyano, halo, or haloalkyl, and n being 1, 2, or 3; and each of R^1, R^2, R^3, R^4, and R^5, independently, is hydrogen, alkyl, alkenyl, alkynyl, alkoxy, hydroxyl, hydroxylalkyl, carboxyl, halo, haloalkyl, amino, thio, nitro, cyano, alkylcarbonyloxy,

alkyloxycarbonyl, alkylcarbonyl, formyl, aminocarbonyl, alkylcarbonylamino, aminocarbonyloxy, or alkyloxycarbonylamino;

provided that when A is an oxygen or a sulfur, both R^a and R^b are deleted; and when A is a nitrogen, R^a is deleted; and

further provided that at least two of R^a, R^b, R^c, and R^d is a moiety of the formula



wherein at least two of R^1, R^2, R^3, R^4, and R^5 are hydroxyl, alkoxy, or alkylcarbonyloxy that are at meta or ortho positions with respect to each other; or a pharmaceutically acceptable salt thereof.